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ScienceDirect

Procedia Social and Behavioral Sciences 1 (2009) 1573–1577

Procedia Social and Behavioral Sciences

World Conference on Educational Sciences 2009

Examining preschools' quality in terms of physical conditions

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Received October 24, 2008; revised December 15, 2008; accepted January 4, 2009

Abstract

This study aims at investigating the quality of preschools in Turkey in terms of educational environment and comparing the qualities of public preschools, private preschools and preschools operating within an institution. The sample of the study consists of randomly selected 26 preschools located in Ankara. ECERS (Harms et al, 1980) is used as data gathering instrument. The data are analyzed by Correlation Analysis and Kruskal-Wallis Test. As a result, the ECERS- R mean scores are found to be below the "good" level and no significant difference is found among three kinds of preschools in terms of educational environment. This shows that there appears to be a need to improve quality in early childhood education centers.

Keywords: Quality, preschools, early childhood environment rating scale (ECERS), environment.

1. Introduction

Early childhood education has been an issue of great concern for so long; however, awareness of the importance of educational programs has increased recently. This is not surprising considering the changes in social and economical structures of societies. Today, more women are working as professionals, which increase the number of children involving in an early childhood program and hence the need for child care. As communities have become more and more aware of the importance of early childhood education, the demand for better quality has increased. Therefore, recently the focus on the importance and necessity of early childhood education shifted on the effects of day care programs' quality on children. Despite the developments in the field, there appear to be some problems regarding the quality of the preschools. Although it is hard to make a precise definition of the quality preschools and it seems to be a relative and value-based concept, generally researchers' definitions of quality dwell on developmentally appropriate practices. High quality in day care is described as the practices directly or indirectly affecting the social, emotional, physical and cognitive development of the children and their ability to learn efficiently (Lamb, 2000). Evidence support that good quality day care has positive outcomes on children (Sylva, 1994; Scarr et al., 1994; Sylva, 1995). Child care global quality has important implications for children's development and their later success in elementary school (Hansen, 2006). Also, major long term impacts of early

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1877-0428
doi:10.1016/j.sbspro.2009.01.276

childhood education on children including less need for special education, less grade retention, better achievement test scores are found out by other researchers (Lazar et al.,1982, cited in Bekman, 1982). Developmentally appropriate practices to be provided at preschools should focus on meeting the needs and interests of children at the education setting. This covers a comprehensive process including the physical conditions, educational program and program administration. A preschool educational setting should establish and maintain a safe, healthy, learning environment where an interesting, secure and enjoyable surrounding encourage children to explore, learn and play (Hohman et al, 1983).

1.1. Measuring Tool

Measuring quality at preschools requires a comprehensive study. The structural variables such as space, number of children per care giver/teacher or group size as well as process variables such as the warm, loving atmosphere should be considered while measuring quality. Instead of focusing merely on structural measures, multiple aspects of process quality should be evaluated. In this study, quality at preschools is examined using the widely used assessment tool ECERS developed by Harms and Clifford in 1980. ECERS, which is an observational instrument focusing on the quality of early childhood environments, has long been used as a self-assessment tool by teaching and administrative staff in child care centers as well as research purposes by scholars and researchers. This scale evaluates many of the components that have been recognized as affecting a preschool's overall quality (Lucci, 2004). The ECERS defines quality as specific behavior observable in the classroom such as teacher sensitivity or involvement, and the presence of structural elements such as materials or schedules. In this respect, it used measures of child-related factors such as materials, activities, health and safety, and teacher-child interactions as well as administrative practices, capturing child care global quality by including both structural and process-oriented indicators.

1.2. Method

The Turkish adaptation of the scale was done in 1996 in a study by Tovim. The study covers three phases as the translation of the ECERS into Turkish, the transliteral equivalence and reliability studies of the Turkish form of the scale. As a result of the study, the Cronbach alpha coefficient was computed as 0,96 and it is found out that the Turkish version of the ECERS is similar to the original one, the scale is transliterally equivalent and can be used by all preschool settings with a desire to monitor and improve their programs (Tovim, 1996). The current study intended to address the question that focused on quality at preschools in Ankara. The quality at preschools was examined in terms of physical conditions using ECERS. The study also attempted to find out whether there were differences among the quality of the three different types of preschools in Turkey. 26 preschools in Ankara were randomly selected for the study. Among these, 12 of them were public preschools, 9 were private and the rest were institution preschools. Observations were conducted within 4 months. Based on a 3-hour observation in the classroom, each item on the ECERS forms was scored and the subscale scores and the total score were calculated accordingly. In order to determine the internal consistency of the scale, a Cronbach alpha coefficient was calculated and found out to be 0.87, which is quite high. This shows that ECERS is a reliable tool for the data used in the study.

2. Results

Table 1 presents information on the characteristics of the teachers and principals of the preschools observed. Table 1 demonstrates that 56% of the teachers in public preschools, 80% of the teachers in institution preschools and half of the teachers in private preschools had a bachelor's degree while 67% of the principals in public preschools, 50% of the principals in private preschools and all of the principals in institution preschools had a bachelor's degree. In general, it is seen that both the teachers and principals of all three types of preschools were experienced educators. However, administrative experience of the principals in institution preschools was low.

Table 2 shows the results for each subscale in the ECERS and the overall score. The mean score is found as 3.82 and alpha coefficient on total score is 0,87, indicating a high internal reliability of the scale. The subscale means cover a wide range. The subscale with the highest mean score was interaction (4,65) and the subscale with the

lowest mean score was program structure (2,58). It is seen that none of the subscales has a mean score of 5.0, which is a criterion score on the ECERS indicating developmentally appropriate practice (Bryant,1991).

Table 1: Characteristics of the teachers and principals of the preschools

			Public		Private		Institution		
			N	%	N	%	N	%	Total
Teachers	Education	High School	4	44	5	42	1	20	10
		Under Graduate	5	56	6	50	4	80	15
		Graduate	0	0	1	8	0	0	1
Column Totals			9		12		5		26
Principals	Education	High School	0	0	1	80	0	0	1
		Under Graduate	6	67	6	50	5	100	17
		Graduate	3	33	5	42	0	0	8
	Experience	Less than 1 year	2	22	2	17	2	40	6
		1-5 years	4	44	4	33	3	60	11
		More than 5 years	2	34	6	50	0	0	8
Column Totals			9		12		5		26
Principals	Experience as Administrator	Yes	6	67	7	58	1	20	14
		No	3	33	5	42	4	80	12
Column Totals			9		12		5		26

The program structure subscale on ECERS includes items as schedule, free play and group time while interaction subscale includes items as supervision of gross motor activities, general supervision of children, discipline staff-child interactions and interactions among children.

Table 2: Mean Scores on ECERS items

Subscale	Mean	Range	SD
Space and Furnishings	4,11	2,25 - 5,50	0,87
Personal Care Routines	4,27	2,16 – 6,30	1,20
Language- Reasoning	4,02	1,25 – 6,25	1,59
Activities	3,25	1,90 – 5,10	0,84
Interaction	4,65	1,60 – 7,00	1,63
Program Structure	2,58	1,30 – 4,00	0,84
Parents and Staff	3,92	2,00 – 6,80	1,01
Overall Mean	3,82		
Coefficient Alpha	0,87		

n=26

In order to determine whether there is a significant relationship among the subscales of the ECERS, the correlations among the ECERS mean subscale scores were examined. When Table 3 is examined, it is seen that there is a significant relationship between space and furnishings and language and reasoning and program structure. There is a strong relationship between personal care routines and interaction and between language and reasoning and parents and staff subscales and finally activities and parents and staff ($p < 0,05$). No significant correlation is found between other subscales.

This study also investigates the answer of the question whether there is a difference among the qualities of three different kinds of preschools that provide child care service in Turkey. Table 4 shows the mean scores for each subscale that private preschools, public preschools and institution preschools obtained as a result of the observations. It is seen from Table 4 that none of the preschool types could obtain a mean rating as high as 5.0. The

highest mean value of public preschools was language and reasoning subscale (4,62), and the lowest mean value was program structure subscale (2,70)

Table 3: Correlations Among the ECERS Mean Subscale Scores

Subscale	Spa.& Fur.	Personal	Lang.-Reas.	Activities	Interaction	Prog. Str.	Par.&St.
Spa.&Fur.	1,00						
Personal C.	0,16	1,00					
Lang.Reas.	0,42*	0,19	1,00				
Activities	0,31	0,08	0,51	1,00			
Interaction	0,59	0,44*	0,50	0,24	1,00		
Prog.Str.	0,41*	0,19	0,31	0,36	0,38	1,00	
Par.&St.	0,34	0,38	0,48*	0,48*	0,30	0,32	1,00

P<0,05

The highest mean value of private preschools was interaction subscale (4,95), and the lowest mean value was program structure subscale (2,70) and finally for the institution preschools, the highest mean score was found to be interaction (4,36) and the lowest was program structure (2,08). It was found out that for each of the three kinds of preschools program structure subscale had the insufficient scores. The quality scores for the public, private and institution preschools was found respectively as 3,82, 3,93 and 3,57.

Table 4: The ECERS Mean Scores for Private, Public and Institution Preschools

Subscale	Public	Private	Institution
Space and Furnishings	4,52	3,89	3,90
Personal Care Routines	3,46	4,85	4,35
Language- Reasoning	4,62	3,90	3,20
Activities	3,20	3,37	3,04
Interaction	4,42	4,95	4,36
Program Structure	2,70	2,70	2,08
Parents and Staff	3,83	3,90	4,10
Overall Mean	3,82	3,93	3,57

Table 5 shows the results of the Kruskall- Wallis Test, which was made in order to find our whether the ECERS scores differ significantly among the three kinds of schools. It is seen that there is no significant difference among ECERS scores according to types of preschools. Based on this finding, it can be said that all three kinds of preschools had the low quality level in terms of physical conditions.

Table 5: Kruskall Wallis Test Results According to School Types

	SCHOOL	n	Mean
ECERS	1	12	14,88
	2	9	12,83
	3	5	11,40
	Total	26	

	ECERS
Chi-Kare	0,834
df	2
p.	0,659

3. Discussion

This study examined the level of quality in preschools in Ankara and compared the qualities of public, private and institution preschools. The findings demonstrate that the preschool quality in our country is beyond

being satisfactory and there is a lack of developmental appropriateness in all three types of preschools. The low scores on the subscale of program structure indicate the negative points regarding program practices at preschools. Moreover, the Kruskall- Wallis Test results demonstrates the fact that total quality level of the three types of preschools are low ,n terms of physical conditions. This fact points out the necessity that both the process indicators and structural indicators of quality should be improved.

It is apparent that there is no standardized implementation particularly for physical conditions among the kinds of preschools. It is recommended that preschools follow the standards of the Ministry of Education. The level of control should be increased and regular audits should be performed. On the job trainings should be provided for both teaching and administrative staff. Principals should be hired depending on their level of experience both as an administrator and an educator. Studies on quality should be encouraged in the field of early childhood education in order to identify the problems more easily. It would be beneficial that some further studies on administrative practices at preschools can be included in these quality studies.

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